



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,202	12/04/2000	Shigehiro Shimada	KOIK-T0215	2182

7590 08/28/2003
Sonnenschein Nath & Rosenthal
P O Box 061080
Wacker Drive Station Sears Tower
Chicago, IL 60606-1080

EXAMINER

CASCHERA, ANTONIO A

ART UNIT	PAPER NUMBER
----------	--------------

2697

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,202

Applicant(s)

SHIMADA ET AL.

Examiner

Antonio A Caschera

Art Unit

2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato (JP10-040395).

In reference to claims 1 and 6, Kato discloses an object outline processing method where outlines of objects, including curved outlines, are extracted using curve data points of 2 reference frames to produce, the same curve data points in intermediate frames, onto a display (see paragraph 31, lines 14-18 of paragraph 30, “solution” section of abstract and Figure 6). Kato also discloses using certain curve data points of the outline of an object of reference frames F1 and Fn to create the object in intermediate frames so that certain curve data points, An and Nn, correspond in all the frames F1-Fn (see paragraphs 31-35 and Figures 5-7).

In reference to claims 3 and 8, Kato discloses all of the claim limitations as applied to claims 1 and 6, respectively above, in addition, Kato discloses the start reference frame F1 and

Art Unit: 2697

end reference frame being F_n (see lines 4-6 of paragraph 31). Kato also discloses using a DDA algorithm to interpolate curve data points, based on those points of reference frames F_1 and F_n , between data midpoints K_1 - K_n of an object in intermediate frame F_k (see paragraphs 35-36 and Figure 7).

In reference to claims 4 and 5, Kato discloses all of the claim limitations as applied to claim 1 above, in addition, Kato discloses using certain curve data points of the outline of an object of reference frames F_1 and F_n to create an object in intermediate frames so that certain curve data points, A_n and N_n , correspond in all the frames F_1 - F_n (see paragraphs 31-35 and Figures 5-7).

In reference to claims 9 and 10, Kato discloses all of the claim limitations as applied to claim 6 above, in addition, Kato discloses using certain curve data points of the outline of an object of reference frames F_1 and F_n to create an object in intermediate frames so that certain curve data points, A_n and N_n , correspond in all the frames F_1 - F_n (see paragraphs 31-35 and Figures 5-7).

In reference to claim 11, Kato discloses an auxiliary memory which stores various programs defining the data processing method (see paragraph 17 and #308 of Figure 1). Kato also discloses an object outline processing method where outlines of objects, including curved outlines, are extracted using curve data points of 2 reference frames to produce, the same curve data points in intermediate frames, onto a display (see paragraph 31, lines 14-18 of paragraph 30, "solution" section of abstract and Figure 6). Kato discloses using certain curve data points of the outline of an object of reference frames F_1 and F_n to create the object in intermediate frames so

that certain curve data points, An and Nn, correspond in all the frames F1-Fn (see paragraphs 31-35 and Figures 5-7).

Response to Arguments

3. Applicant's arguments, see page 4, section (A), filed 6/23/2003, with respect to the disclosure, have been fully considered and are persuasive. A substitute specification has been filed, paper no. 8, including corrections to overcome minor informalities previously objected to, therefore the objection to the specification has been withdrawn.

4. Applicant's arguments, see page 5, section (B), filed 6/23/2003, with respect to the drawings, have been fully considered and are persuasive. The substitute specification includes corrections to overcome objections to non-referenced items in the drawings, therefore, the objection to the drawings has been withdrawn.

5. Applicant's arguments, see page 5, section (C), filed 6/23/2003, with respect to claims 1-6 and 8-11 have been fully considered and are persuasive. The objection of claims 1-6 and 8-11 has been withdrawn.

6. Applicant's arguments filed 6/23/2003 have been fully considered but they are not persuasive. Note, the cancellation of claims 2 and 7 has been noted.

In reference to claims 1, 6 and 11, see pages 5-6 of applicant's remarks, applicant claims Kato fails to disclose or even suggest pursuing a correspondence point identified on a curve in a first frame from a picture image, as newly amended to independent claims 1, 6 and 11, however the office disagrees. Kato discloses an image-processing system based on an embodiment of the invention (see paragraph 31 and Figure 1) and the processor of the system performing the curve

Art Unit: 2697

detecting/generating steps, found in paragraphs 32-37, in order to make the image of each intermediate frame between F1-Fn, into a fully processed image (see last 3 lines of paragraph 31). The office interprets the curve detecting/generating processing, found in paragraphs 31-37, along with the above fully processed image creation to be substantially similar to applicant's above stated limitation. Further, the applicant seems to claim that Kato relies on user intervention to select points from the image for curve processing. The office agrees that Kato does rely on user intervention to select points from the image however the office believes applicant's independent claims 1, 6 and 11 are not clearly differentiated from such a user intervention. Further, these claims solely state, "A curve generating apparatus adapted for generating, from a correspondence point identified on a curve in a first frame..." (see lines 1-2 of claim 1, for example) whereby the word, "identified" does not explicitly disclose the use of non-user intervention. The word, "identified" solely discloses that the points are chosen, detected etc. however does not disclose the means that they are chosen. Therefore, the office believes Kato is directly applicable to independent claims 1, 6 and 11 and further dependent claims 3-5 and 8-10.

References Cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Nakamura (U.S. Patent 5,287,441)
 - Nakamura discloses a method of drawing parametric curves when rounding respective points on curves obtained by equal division in adjacent points.
- b. Tankelevich (U.S. Patent 5,594,852)

Art Unit: 2697

- Tankelevich discloses a method of generating curves and an associated method for operating a curve forming device.
- c. Berand et al. (U.S. Patent 5,598,182)
- Berand et al. discloses an image processing apparatus for generating visually distinct images by identifying boundary lines for defining an object of the image.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso, can be reached at (703)-305-3885.

Any response to this action should be mailed to:

Art Unit: 2697

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

aac

8/18/03



JOSEPH MANCUSO
PRIMARY EXAMINER